

TWO NEW SPECIES OF *AECHMEA* (BROMELIACEAE)

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ABSTRACT

Two new species of *Aechmea* are described: *A. haltonii* (subgen. *Podaechmea*) from Panamá and *A. flemingii* (subgen. *Aechmea*) from Guadeloupe.

KEY WORDS: *Aechmea*, Bromeliaceae, Guadeloupe, Panamá

Aechmea flemingii Luther, *sp. nov.* (Figure 1). TYPE: GUADELOUPE. Grande Terre: *Pterocarpus* woods N of La Raizet airport, *Conrad Fleming s.n. legit*, 14 May 1985, (SEL 85-241), flowered in cultivation, 10 July 1991, *H.E. Luther s.n.* (HOLOTYPE: SEL; Isotypes: K,US).

Aechmea strobilina (Buerling) L.B. Smith & R.W. Read, *cui affinis*, *spinis foliorum perminoribus, bracteis florigeris majoribus castaneisque differt.*

Plant flowering 0.6 m tall, very densely clustering. Leaves densely rosulate, spreading, 0.8-1.3 m long, bright green. Leaf sheaths elliptic, 13-15 x 8-10 cm, entire, subdensely dark punctate lepidote, somewhat castaneous toward the base abaxially. Leaf blades ligulate, acute to rounded and apiculate, pungent, 3-5 cm wide, laxly and inconspicuously antrorse serrate with dark 0.5 mm long spines, inconspicuously punctate lepidote. Scape erect, mostly concealed within the leaf sheaths. Scape bracts erect, tubular-imbricate, narrowly lanceolate, attenuate, entire, the sheaths castaneous abaxially, the blades green. Inflorescence densely digitate with 4 to 10 branches, 20 x 15 cm, mostly concealed within the rosette. Primary branches lustrous, castaneous, orangish green to bronzy green, with a pale green margin. Branches sessile, slightly spreading, each with 1-3 sterile bracts at the base, 8-12 x 3 cm, 10 to 25 flowered. Floral bracts erect, densely imbricate, concealing the rachis and most of

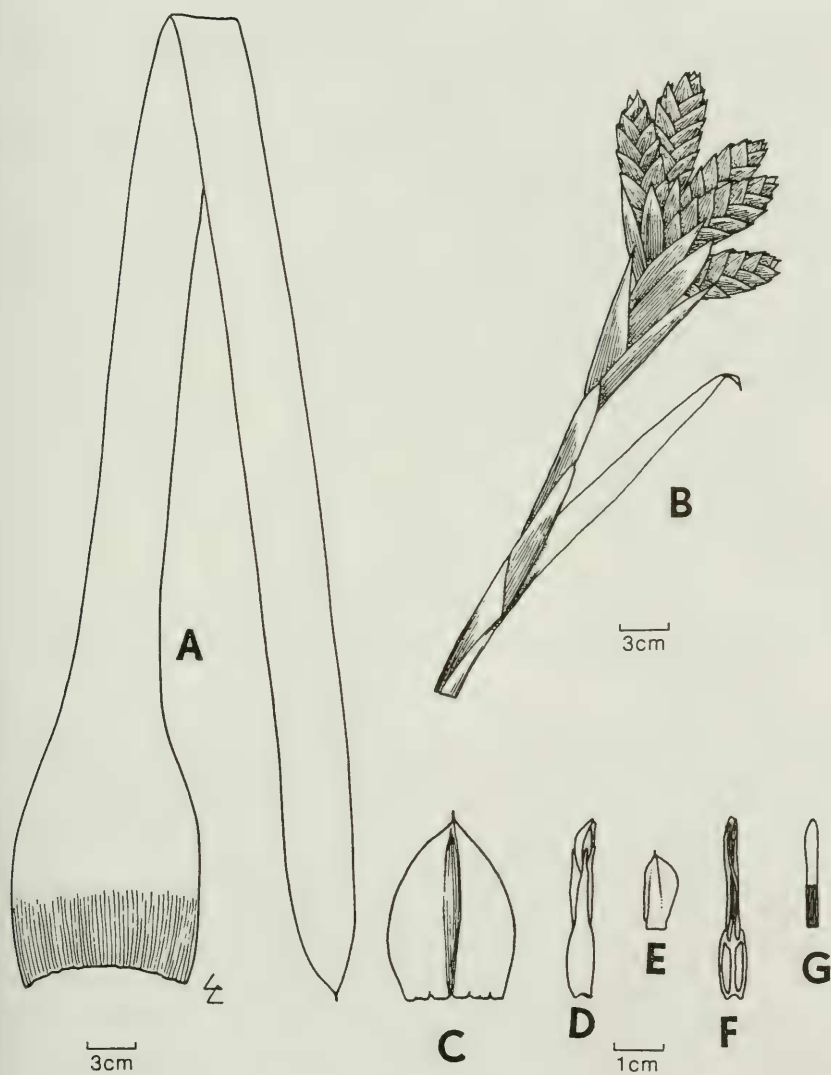


Figure 1. *Aechmea flemingii*. A. leaf. B. inflorescence. C. floral bract. D. flower. E. sepal. F. flower, longitudinal section. G. petal.

the flowers, ovate, acute, mucronate, 32-37 mm long, carinate, coriaceous, pale punctate lepidote especially near the keel, lustrous, orangish green or bronzyish green, drying castaneous with a pale margin. Flowers sessile, erect. Sepals asymmetrical, oblong to obovate, mucronate, 15-17 mm long, the adaxial pair carinate, green. Corolla erect, tubular, barely opening at anthesis. Petals ligulate, obtuse, 20-23 mm long, each with a pair of 7 mm long, basal appendages, bright yellow. Fruit an ellipsoid dark blue berry.

Paratype: GUADELOUPE. type locality, clone of the holotype, 14 May 1985, *Conrad Fleming s.n.* (SEL).

Aechmea flemingii closely resembles *A. strobilina* (Buerling) L.B. Smith & R.W. Read from the Caribbean coast of Panamá, but is clearly distinct due to its small and lax leaf serrations and larger floral bracts. In addition, the primary and floral bracts of *A. strobilina* are brightly colored, (rose red or orange), and the petals are pale (white or cream).

The name honors the collector, Conrad Fleming of St. Croix, Virgin Islands, a well known plantsman.

Aechmea flemingii is evidently a narrow island endemic probably overlooked due to its inconspicuous flowering habit with the inflorescence mostly concealed within its large leafy rosette.

***Aechmea haltonii* Luther, *sp. nov.* (Figure 2). TYPE: PANAMA. Prov. Coclé: El Copé, lithophyte, Aug 1985, *J. Halton s.n.* (HOLOTYPE: SEL).**

A *Aechmea mexicana* Baker, cui affinis, laminis foliorum triangularibus, acutis, pungentibus; scapis bracteis primariisque serratis; sepalis petalisque brevioribus differt.

Plant flowering 0.75-1.50 m tall, clustering. Leaves densely rosulate, erect to spreading, 30 to 45 in number, 35-90 cm long, coriaceous. Leaf sheaths elliptic, 15-25 x 6-15 cm, entire, densely brown punctate lepidote, dark castaneous toward the base abaxially. Leaf blades triangular, acute, pungent, 2-6 cm wide, subdensely serrate with dark 3-8 mm long straight or antrorse spines, subdensely pale punctate lepidote, bright green. Scape erect, 25-65 cm x 8-12 mm, fugaciously white lanate, bright red or pink. Scape bracts elliptic, acute, pungent, serrate, the lowest subfoliaceous, the upper narrowly elliptic, erect and much exceeding the internodes, bright red or pink with green tips. Inflorescence laxly tripinnate, 40-60 x 20-40 cm, many flowered. Primary bracts elliptic, acute, pungent, serrate, exceeding the naked, sterile bases of the branches, often reflexed, gradually diminishing in size toward the apex of the inflorescence, thin coriaceous, nerved, sparsely pale lanuginous lepidote, bright red or pink. Primary branches with a flattened 5-90 mm long, sterile,

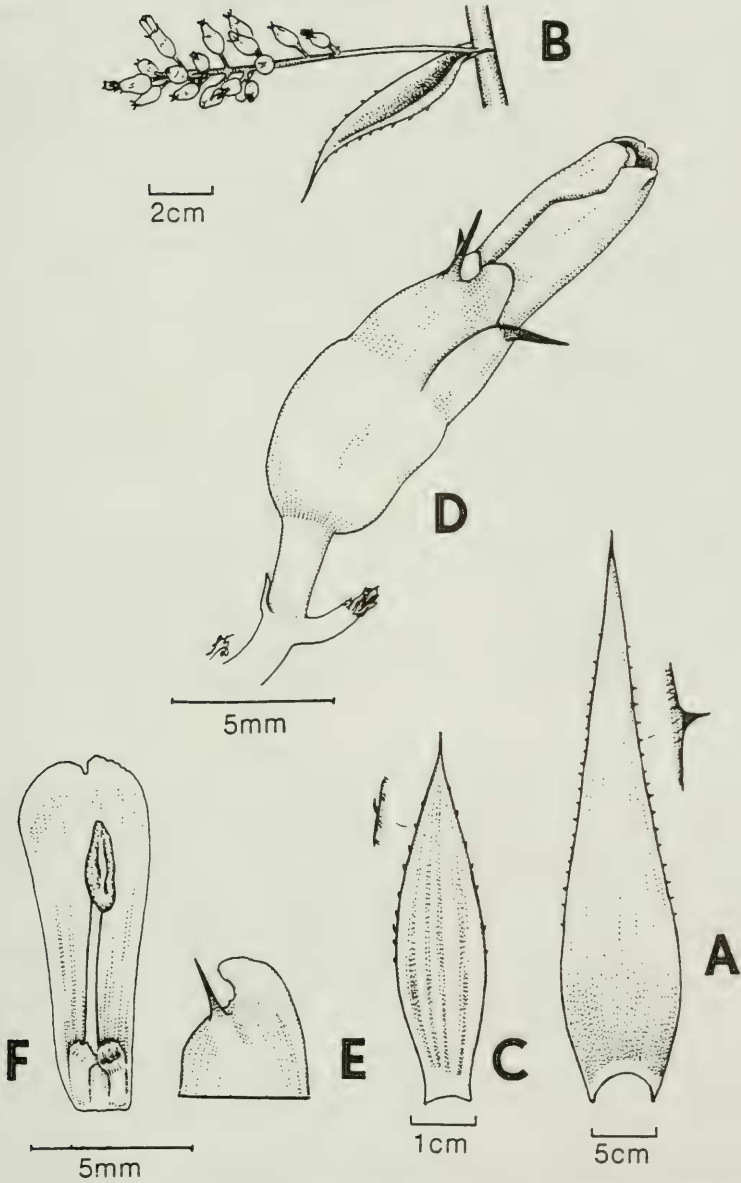


Figure 2. *Aechmea haltonii*. A. leaf, adaxial surface. B. branch of inflorescence. C. primary bract. D. flower. E. sepal. F. petal and stamen.

ebracteate, sparsely pale lepidote base, spreading at 45-90° from the main axis, 2-25 cm long. Secondary branches with a 1-5 mm long base, 1 to 7 flowered. Floral bracts narrowly triangular to filiform, attenuate, 1.00-1.25 mm long, red. Flowers with a slender 2-3 mm long, green, glabrous pedicel, polystichously spreading at ca. 45° from the axis at anthesis. Sepals very asymmetrical, truncate, 4 x 4 mm, the broad lateral wing exceeding the 1 mm long dark terminal mucro, glabrous, green with red margins. Corolla erect, tubular, barely opening at anthesis. Petals oblanceolate, obtuse, or emarginate, slightly cucullate, 10-11 mm long, each with a pair of basal appendages, pink. Ovary ellipsoid, glabrous, pale green, epigynous tube ca. 1 mm deep, placentae apical. Fruit a globose white berry 6-8 mm long.

Paratypes: PANAMA. Type locality, clone of the holotype (SEL 85-1447), flowered in cultivation, 12 Dec 1990, *H. Luther s.n.* (SEL); March 1991, *J. Anderson s.n.* (SEL); 28 Jul 1991, *H. Luther s.n.* (PMA,US); Prov. Veraguas, 2 km above Santa Fe on road to Cerro Negro, 2200 feet, epiphyte, 23 Sep 1991, *C. Skotak s.n.* (SEL).

Aechmea haltonii seems to be most closely related to *A. mexicana* Baker, a species known from México to western Ecuador. It can be immediately distinguished by its triangular and conspicuously dark serrate leaf blades, serrate scape and primary bracts, broader inflorescence, and smaller flowers.

The name honors the original collector, the late Joseph S. Halton, first Display Greenhouse Manager at the Marie Selby Botanical Gardens, who introduced many ornamental and interesting tropical plants to horticulture.

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